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EXAMINER

PRAKASAM, RAMYA G

ART UNIT

PAPER NUMBER

3651

MAIL DATE

DELIVERY MODE

01/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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DETAILED ACTION

1. The amendment filed on 10/16/2008 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Claim Rejections - 35 USC § 102

3. Claims 1-52 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakamura (US Patent No. 6,236,904).

Nakamura discloses a substrate loading and unloading apparatus comprising a substrate holder with a substrate support table and locating means co-operable with the table (See Figure 1 and Column 3, lines 59-67 and Column 4, lines 1-12)., a vacuum vessel defining a loading and unloading chamber with a transfer port (See Column 3, lines 59-67 and Column 4, lines 1-12). which is communicable in use with an evacuated region, and release means for withholding cooperation of the locating means and the table (See Figure 1) and providing a temporary substrate support clear of the table (See Figure 1).

Re Claims 2 -6: the locating means comprises resilient means to cause a supported substrate to be biased towards the table and defines a reference plane (sensor), where the reference plan is defined by three spaced apart contact points (See Column 3, lines 59-67 and Column 4, lines 1-12).

Re Claims 9-17: the apparatus has a release means comprising a displacing means with at least one displacing member movable to engage and depress the table (See Figure 2 and Column 4, lines 15-32), comprising a pusher and drive means.

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Re Claims 18-42 and 46-53: Apparatus contains a temporary support means (1) movable upwardly through passage means in the table (See figure 4). The temporary support means comprises at least 3 support pins.

Re Claim 43: apparatus contains a transfer port (See Column 3, lines 59-67 and Column 4, lines 1-12).

Re Claim 44: vessel is substantially boxed shaped (See Figures)

Re Claim 45: apparatus is constructed as a module attached to a substrate processing machine (See Figures)

4. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Tanigawa (U.S. Patent Application No. 2001/0022930).

Nakamura discloses all claimed limitations except for the use of a strong as a resilient mounting means. Tanigawa utilizes a spring (41) as a resilient mounting means for the purpose of holding a carrier containing a substrate (See Paragraphs 102 – 103). It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify Nakamura by utilizing a spring as a resilient mounting means for the purpose of holding a carrier containing a substrate.

5. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura in view of Hassan (US Patent No. 3,968,885)

Nakamura discloses all claimed limitations, except for the use of the apparatus in an electron beam-pattern writing machine. Hassan discloses the use of a substrate loading and unloading apparatus in a vacuum chamber in an electron beam-pattern writing machine (See Abstract) for the purpose of pattern writing without affecting the vacuum level in the chamber. It

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would have been obvious to a person of ordinary skill in the art at the time of applicants invention to modify Nakamura by utilizing a substrate loading and unloading apparatus in a vacuum chamber in an electron beam-pattern writing machine for the purpose of pattern writing without affecting the vacuum level in the chamber.

Response to Arguments

6. Applicant's arguments filed on 10/16/2008 have been fully considered but they are not persuasive.

With regards to applicant's argument that Nakamura does not disclose a vacuum vessel, 'vessel' can be defined as an agent of some quality (such as an agent of vacuum suction). WEBSTERS II DICTIONARY 779 (3rd ed. 2005). Therefore, it is clear that a vacuum vessel does in fact exist in Nakamura. This vessel is able to provide a vacuum environment in that it provides a vacuum attraction for the wafer. Applicant's claim does not provide for an entire vacuum chamber, only for a vacuum vessel able to provide a vacuum environment.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that the release means be something that switches off the vacuum attraction of the substrate onto the arm) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Therefore, the claims stand rejected.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAMYA G. PRAKASAM whose telephone number is (571)272-6011. The examiner can normally be reached on Monday - Thursday, 8:30am-7pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gene Crawford/
Supervisory Patent Examiner, Art Unit
3651

1/5/2008

RGP